

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (original) An isolated nucleic acid molecule comprising
 - (a) a first class switch region (S_1) nucleotide sequence of an upstream immunoglobulin locus under transcriptional control of a first promoter;
 - (b) a second class switch region (S_2) nucleotide sequence of an immunoglobulin locus downstream of said upstream Ig locus under transcriptional control of a second promoter, wherein said S_2 sequence serves as a region-specific substrate for class switch recombination (CSR);
 - (c) a reporter gene nucleotide sequence encoding a reporter molecule, interposed between said S_1 and S_2 sequences in reverse transcriptional orientation, and
 - (d) a promoter, downstream of said nucleotide sequence encoding said reporter molecule, allowing the expression of said reporter molecule only following CSR between said S_1 and S_2 sequences.
2. (original) The nucleic acid molecule of claim 1 wherein said S_1 is an S_{μ} sequence and said S_2 is an $S_{\gamma 2}$ sequence.
3. (original) The nucleic acid molecule of claim 1 wherein said S_1 is an S_{μ} sequence and said S_2 is an S_{ϵ} sequence.
4. (original) The nucleic acid molecule of claim 2 wherein said S_1 and S_2 sequences are G-rich switch region DNA sequences.
5. (original) The nucleic acid molecule of claim 3 wherein said S_1 and S_2 sequences are G-rich switch region DNA sequences.
6. (original) The nucleic acid molecule of claim 1 wherein said nucleic acid in part (c) and said promoter in part (d) are under control of an internal ribosome entry site (IRES).
7. (original) The nucleic acid molecule of claim 1 wherein said nucleic acid in part (c) encodes a Green Fluorescent Protein (GFP) molecule.
8. (original) The nucleic acid molecule of claim 1 wherein said nucleic acid in part (c) encodes a reporter molecule selected from the group consisting of β -galactosidase, luciferase, and secreted alkaline phosphatase (SEAP).
9. (original) The nucleic acid molecule of claim 1 wherein said first and second promoters are non-inducible constitutive promoters.

10. (original) The nucleic acid molecule of claim 9 wherein said first promoter is a CMV promoter.

11. (original) The nucleic acid molecule of claim 9 wherein said second promoter is an SV promoter.

12. (original) An isolated nucleic acid molecule comprising

(a) a human S μ nucleotide sequence under control of a CMV promoter;

(b) a human S γ_2 nucleotide sequence under control of an SV promoter;

(c) an RSV LTR enhancer/promoter and GFP gene under control of an internal ribosome entry site (IRES), interposed between said S μ and S γ_2 sequences, in reverse transcriptional orientation,

(d) a 5' splicing donor site from human β -globulin gene, 3' of said S μ sequence; and

(e) a 3' splicing acceptor site and C ϵ 1 exon, 3' of said S γ_2 sequence.

13. (original) The nucleic acid molecule of claim 12 further comprising a nucleic acid fragment of a cytokine-inducible promoter for Ig germline transcription, 5' of said CMV promoter.

14. (original) The nucleic acid molecule of claim 13 wherein said cytokine-inducible promoter is an IL-4 inducible I ϵ promoter.

15. (original) The nucleic acid molecule of claim 12 selected from the group consisting of XF-1, XF-5a, XF-8, XF-2a, XF-2b, XF-6a and XF-6b.

16. (original) A switch vector comprising a nucleic acid molecule of claim 1.

17. (original) A switch vector comprising a nucleic acid molecule of 12.

18. (original) A recombinant host cell stably transfected with the switch vector of claim 16.

19. (original) A recombinant host cell stably transfected with the switch vector of claim 17.

20. (original) The host cell of claim 18 which is a mammalian cell.

21. (original) The host cell of claim 20, which is a Chinese Hamster Ovary (CHO) cell.

22. (currently amended) The host cell of claim 20 which is a primary human B cell or a B cell line cell.

23-48. (canceled)